## NEW REGULATORY FINANCE

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## Chapter 1 Rate of Return Regulation

## 1.1 The Rationale of Regulation

While this book is not intended to cover all facets of rate of return regulation, but rather to cover the application of financial theory in regulatory rate hearings, it is nevertheless appropriate to preface the book with some brief comments on the general setting. More complete discussions are available in regulatory texts such as Phillips (1993), Bonbright (1966), Kahn (1970), and Howe and Rasmussen (1982).

The capitalistic free-market system, which normally sets prices, output levels, and general terms of trade in society, is generally unworkable in the case of some services provided by public utilities because utility services are largely monopolistic in nature (for example, energy distribution and transmission). That is, they do not experience full competition in a particular market area or in dispensing a particular service. As a result, public utility regulation replaces the free market system by establishing allowable prices for the rendering of public services.

The purpose of regulation is to replicate the results that the competitive market system would achieve in the way of reasonable prices and profits. This view was eloquently expressed by Bonbright (1966):

Regulation, it is said, is a substitute for competition. Hence its objective should be to compel a regulated enterprise, despite its possession of complete or partial monopoly, to charge rates approximating those which it would charge if free from regulation but subject to the market forces of competition. In short, regulation should be not only a substitute for competition, but a closely imitative substitute. See Bonbright (1966) p. 3.

Regulation provides a correcting mechanism for market failure due to the presence of natural monopoly. The latter occurs when it is less costly to have a single provider of a service than to have multiple or competing providers. Public utilities can operate at substantially lower costs under monopolistic conditions than under competition by eliminating the duplication of costly plant facilities and distribution networks, or by facilitating the realization of optimal plant sizes. Economies of demand diversity that result from serving an entire market rather than serving a smaller fragmented market will also emerge under a regime of regulated monopoly.

In the last two decades, socio-political trends toward the free market and away from economic regulation have not escaped public utilities. Growing